CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2012-XXXX

WASTE DISCHARGE REQUIREMENTS
FOR
RIVIERA WEST MUTUAL WATER COMPANY
RIVIERA WEST WATER TREATMENT PLANT
LAKE COUNTY

The California Regional Water Quality Control Board, Central Valley Region (hereafter Central Valley Water Board), finds that:

1. The Riviera West Mutual Water Company (hereafter "Discharger") submitted Report of Waste Discharge (RWD) dated 29 December 2008, to apply for Waste Discharge Requirements (WDRs) for the existing Riviera West Water Treatment Plant (WTP). Additional information was submitted on 24 April 2009.

2. The Riviera West Water Treatment Plant (WTP) and land application area are located at 8560 Soda Bay Road on the edge of Clear Lake (Assessors Parcel Nos. 44-340-25 and -24) Section 9, T13N, R8W, MDB&M, as shown on Attachment A, which is attached hereto and made part of the Order by reference.

3. The Discharger owns and operates the WTP and land application area, therefore is responsible for compliance with this Order.

4. Before the permit was rescinded, filter backwash supernatant was allowed to be discharged to Clear Lake under National Pollutant Discharge Elimination System (NPDES) Order R5-2002-0130. Cease and Desist Order (CDO) R5-2002-0131 was issued concurrent with the NPDES permit due to a longstanding failure to submit monitoring reports and threatened violations of effluent limitations.

5. The Discharger currently applies supernatant to an adjacent spray field. This discharge to land is not currently regulated. On 2 March 2011, a Notice of Violation and Order for Technical Reports was issued for failure to submit the requested additional information needed to complete the Report of Waste Discharge. The Discharger did not comply with the Order. However, the Discharger was cooperative in providing the necessary information needed to develop the tentative WDRs.

6. NPDES Order R5-2002-0130 expired on 30 June 2007 and was rescinded on 4 August 2011. The Discharger currently applies supernatant to an adjacent spray field. This discharge to land is not currently regulated.

EXISTING FACILITY AND DISCHARGE

7. Raw water from Clear Lake is pumped to the Riviera West WTP for treatment prior to distribution as potable water for the users of the Riviera West residential subdivision. The water treatment plant has been in operation since the 1970's.

8. The WTP provides treatment by coagulation, filtration, and chlorine disinfection. The WTP site plan is shown on Attachment B, which is attached hereto and made part of the Order by reference. Treated water is pumped to a storage tank for distribution. Solids that settle in the backwash tank are drained into the sludge holding tank. The sludge holding tank is pumped by a septic hauler for offsite disposal to a permitted facility.

9. Supernatant is decanted from the filter backwash tank and is land applied by sprinkler system to an adjacent two acre site, as shown in Attachment C, which is attached hereto and made part of the Order by reference.

10. The land application area (LAA) has a total area of approximately two acres and a net usable area of approximately 0.77 acres. The LAA is a hillside area that slopes to the north and northeast towards Clear Lake at a gradient of approximately 15 percent. It is covered by a moderately dense growth of native trees and grasses.

11. An existing gunite-lined drainage ditch is located along the northern property line of the LAA. The existing ditch conveys stormwater runoff from Soda Bay Road into a 36-inch pipe that drains into Clear Lake.

12. Monthly filter backwash water flow rates from 2008 are shown below. Approximately 5,000 gallons per day (gpd) of backwash water is generated. However, the Discharger states flow rates from 10,000 gpd to 15,000 gpd can occur during the summer months when more frequent backwashing takes place. The Discharger plans to irrigate with backwash water year round. During the summer months, when water usage is high, approximately 0.28 inches per day (in/day) of filter backwash water will be land-applied.

Filter Backwash Water Flow Rates

Month	Monthly Flow, gallons	Average Daily Flow, gpd
January	101,000	3,258
February	82,000	2,828
March	81,000	2,613
April	104,000	3,467
May	185,000	5,968
June	157,000	5,233
July	212,000	6,839
August	206,000	6,645
September	208,000	6,933
October	148,000	4,774
November	105,000	3,500
December	117,000	3,774
	Average	4,653

13. A geotechnical investigation, conducted within the LAA, indicated a soil infiltration rate of approximately 5.2 gpd/sq ft (8.3 in/day).

14. The following table summarizes raw and backwash water quality data from a single sampling event in January 2009.

	Analytical Result (mg/L except as noted)	
Constituent	Raw Water	Backwash Water
Aluminum	< 0.050	0.24
Arsenic	< 0.0020	< 0.0020
Boron	1.4	1.4
Cadmium	< 0.010	< 0.010
Calcium	28	27
Chromium	< 0.010	< 0.010
Copper	< 0.020	< 0.020
Iron	0.11	< 0.10
Lead	< 0.0050	< 0.0050
Magnesium	20	19
Manganese	< 0.020	0.084
Mercury	< 0.0010	< 0.0010
Nickel	< 0.010	< 0.010
Potassium	2.6	2.8
Silver	< 0.010	< 0.010
Sodium	15	16
Zinc	< 0.020	0.11
Total Alkalinity	160	160
Total Hardness	153	146
pH, std limits	7.7	7.6
Total Phosphorus	< 0.10	0.22
Total Dissolved Solids	170	180
Total Suspended Solids	1.8	3.8
Nitrate	< 1.0	< 1.0
Phosphate	0.7	1.0
Chloride	8	12
Sulfate	5.3	5.5
Total Coliform Organisms, MPN/100ml	140	< 1.0
Total Trihalomethanes, µg/L	< 0.5	25.4

15. The analytical results above indicate that both the raw and backwash water are fairly similar in quality, with the exception of slightly elevated levels of aluminum, manganese, zinc, phosphorus, chloride, and total trihalomethanes (THMs). The elevated minerals concentrations are likely associated with samples not being filtered prior to preservation.

16. The backwash water quality appears to be good quality, with most constituents below primary and secondary maximum contaminant levels (MCLs), with the exception of manganese. The manganese concentration in the backwash water was slightly higher than the secondary MCL limit of 0.05 mg/L. However, the treatment process does not add manganese, so it is likely naturally-occurring in the lake water.

PROPOSED CHANGES TO FACILITY

17. The Discharger stopped discharging directly to Clear Lake and converted to a land discharge without first submitting a Report of Waste Discharge. The following changes were proposed in the RWD that was eventually submitted, and were described in the Initial Study, but some were never completed.

    Proposed changes to the Riviera West WTP are discussed below. A process flow diagram of the proposed treatment system is shown on Attachment D, which is attached hereto and made part of the Order by reference.

    a. A clarifier will be installed prior to the filters to remove sediment and enhance filter efficiency. In the interim, a 7-foot diameter by 7-foot high clarifier will be installed within the WTP area, as shown on Attachment B. A permanent 30-foot diameter by 18-foot high clarifier tank will be installed at the LAA property as shown on Attachment C.

    b. A cut-off ditch (tailwater system) will be installed to collect supernatant runoff from the LAA; re-circulate runoff back into the 45,000 gallon filter backwash tank; and prevent collection of supernatant/stormwater mixtures from entering the existing drainage ditch.

       Supernatant runoff will collect in the cut-off ditch and gravity flow into a sump. Check dams will be located along the ditch path to control flow and sediment from entering the sump. During normal operation, the tailwater return gate valve will be open and supernatant runoff will gravity flow from the sump back to the filter backwash tank. To prevent sump overflows and supernatant discharge to surface waters, a high water level flow switch will be installed in the sump. When the flow switch is triggered, the backwash filter pump will shut off and discharge to the LAA will cease. During all other times, the tailwater return gate valve will be closed and stormwater that collects in the cut-off ditch will overflow onto the spillway and into the existing drainage ditch.

18. The cut-off ditch has not been constructed. Therefore, there is an ongoing threat of discharge to surface water. The Discharger is subject to the following conditions as specified in the Major Use Permit UP 09-14.

    a. Prior to final grading permits, or a grading exemption, for the bio-swale (cut-off ditch), the permit holder shall obtain or show evidence of easements for the off-tract portions of the driveway that accesses the water plant.

    The easement issue involves private land that is not part of the subdivision and may require legal action for resolution. Until the easement is recorded, the Discharger will not be able to obtain the required local permits. Therefore, it is appropriate for this Order to include a compliance schedule and allow one year for resolution to ensure that these improvements will be completed. However, this Order prohibits the discharge of waste to surface waters. The Discharger must submit an *Interim Compliance Plan* specifying in detail how such discharges will be prevented until the facility improvements are complete.

    Frequent rain events are typical during the winter months in Lake County. The Discharger proposes to apply supernatant backwash water year round. This Order allows the discharge (combined precipitation and applied supernatant) to the LAA not to exceed a maximum of two inches per day (in/day). The soil capacity is approximately 8.3 in/day and the prohibition will provide a safety factor of greater than four. In addition, the *Interim Compliance Plan* must also specify how the Discharger will comply with this requirement.

SITE-SPECIFIC CONDITIONS

19. The Riviera West Mutual WTP is located on the west shore of Clear Lake, north of Konocti Bay. The LAA is adjacent to and north of the treatment plant access road, Soda Bay Road, and west of the WTP.

20. Based on soil mapping by the U.S Department of Agriculture, Natural Resources Conservation Service Web Soil Survey, soils throughout the site consist of the following:

    a. Relatively shallow, gently sloping, well-drained soils formed from volcanic ash.

    b. The surface layer is a loam about 26 inches thick over gravelly clay loam that extends to weathered volcanic bedrock at a depth of about 63 inches.

    c. Soil permeability is moderately high, runoff is moderately slow, and the hazard of erosion is slight.

21. Two test soil borings within the LAA were drilled during the geotechnical investigation conducted in February 2009. Surface soils encountered in the borings consist of clayey sands with gravel within the upper 5 to 12 feet, underlain by silty sand with gravel. Groundwater was not encountered in any of the test borings, which were

advanced to depths of approximately 30 feet, where refusal occurred.

22. The WTP site is not located within the 100-year flood zone.

23. Based on the Department of Water Resource rainfall data for the Kelseyville Station No. A80 4488 00, the average annual precipitation near the facility is approximately 25.79 inches. The 100-year return period precipitation is approximately 46.72 inches. The reference evapotranspiration rate for the inland San Francisco Bay Area (Lake County) is approximately 49.4 inches.

GROUNDWATER CONSIDERATIONS

24. The LAA is sloped, ranging in elevations approximately 1,400 to 1,490 feet. Clear Lake has an approximate elevation of 1,329 feet. Based on information provided in the RWD, the groundwater table is at or slightly above lake level.

25. Based on topography and subsurface conditions, the local direction of shallow groundwater flow is likely eastward towards the lake.

26. The RWD did not provide data to characterize groundwater quality near or at the WTP site. However, based on subsurface conditions and proximity of the WTP to the lake, it is reasonable to expect that shallow groundwater quality is very similar to that of the lake.

BASIN PLAN, BENEFICIAL USES, AND REGULATORY CONSIDERATIONS

27. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins,* Fourth Edition, revised October 2011 (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Board. Pursuant to Water Code section 13263(a), waste discharge requirements must implement the Basin Plan.

28. Surface water drainage is to Clear Lake. The beneficial uses of Clear Lake are municipal and domestic supply; agricultural supply; water contact recreation; non-contact water recreation; warm freshwater habitat; spawning reproduction and/or early development; wildlife habitat; and commercial and sport fishing.

29. The beneficial uses of underlying groundwater are municipal and domestic water supply, agricultural supply, and industrial supply.

30. The Basin Plan establishes narrative water quality objectives for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets forth a numeric objective for total coliform organisms.

31. The Basin Plan's narrative water quality objectives for chemical constituents, at a minimum, require waters designated as domestic or municipal supply to meet the MCLs specified in Title 22. The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.

32. In summary, the narrative toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, animal, plant, or aquatic life associated with designated beneficial uses. Quantifying a narrative water quality objective requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses.

33. The Basin Plan's numeric water quality objective for bacteria requires that the most probable number (MPN) of coliform organisms over any seven-day period shall be less than 2.2 per 100 mL in MUN groundwater. The applicability of this objective to groundwater designated as MUN has been affirmed by State Water Board Order WQO-2003-0014 and by subsequent decisions of the Sacramento County Superior Court and California Court of Appeal, 3rd Appellate District.

ANTIDEGRADATION ANALYSIS

34. State Water Board Resolution 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (hereafter Resolution 68-16) prohibits degradation of groundwater unless it has been shown that:

    a. The degradation is consistent with the maximum benefit to the people of the State.

    b. The degradation will not unreasonably affect present and anticipated future beneficial uses.

    c. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives, and

    d. The Discharger employs best practicable treatment or control (BPTC) to minimize degradation.

35. Based on the RWD, raw water extracted from Clear Lake and the filter backwash supernatant are similar in quality; both are good quality water with most waste constituents not exceeding primary and/or secondary MCLs. Therefore, the land application of backwash supernatant is unlikely to impact groundwater quality.

36. Degradation of groundwater by some of the typical waste constituents associated with discharges from a municipal water treatment facility is consistent with the maximum benefit to the people of the State. The technology, energy, and waste management advantages of municipal utility service far exceed any benefits derived from reliance on

numerous, individual domestic wells, and the impact on water quality will be substantially less. When allowed, the degree of degradation permitted depends upon many factors (i.e., background water quality, the waste constituent, the beneficial uses and most stringent water quality objective, source control measures, and waste constituent treatability).

37. Constituents of concern that have the potential to degrade groundwater include salts (primarily TDS), nutrients and THMs, as discussed below:

    a. Compared to the lake water TDS concentration of 170 mg/L, the filter backwash supernatant TDS concentration is similar (approximately 180 mg/L). TDS effluent quality is expected to remain the same despite the installation of a clarifier. Therefore, the discharge is not likely to degrade groundwater quality due to increased salinity, and a TDS effluent limit is not required to protect groundwater quality.

    b. For nutrients such as nitrate, the potential for unreasonable degradation depends not only on the quality of the treated effluent, but the ability of the vadose zone below the land application area to provide an environment conducive to nitrification and denitrification to convert the effluent nitrogen to nitrate and the nitrate to nitrogen gas before it reaches the water table. Both the lake water and the backwash supernatant nitrate (as nitrogen) concentration are less than 1.0 mg/L. Therefore, the discharge is not likely to degrade groundwater quality due to increased nitrate, and a nitrate effluent limit is not required to protect groundwater quality.

    c. Compared to the lake water THMs concentration of less than 0.5 mg/L, the filter backwash supernatant THMs concentration is elevated at approximately 25.41 mg/L. The supernatant will be applied by sprinkler irrigation and it is likely that most of the THMs will volatilize before the water percolates into the ground. In addition, THMs found in the supernatant do not exceed applicable primary and secondary MCLs. Therefore, the discharge is not likely to degrade groundwater quality due to increased THMs, and a THMs effluent limit is not required to protect groundwater quality.

38. The WTP provides treatment and control of the discharge that incorporates:

    a. Technology for treatment to drinking water standards;

    b. Approximately 0.77 net acres of land application area available for the application of filter backwash supernatant; and

    c. A tailwater system to collect and re-circulate supernatant runoff back into the backwash tank, and prevent the discharge of supernatant/stormwater mixtures to surface waters.

39. At this time, there is no reason to believe that additional control measures are needed to achieve the highest water quality consistent with the maximum benefit to the

people of the State. The discharge poses little threat to groundwater quality based on the following:

a. Character of the raw water treated at the WTP,

b. Nature of the treatment processes,

c. Character of the filter backwash supernatant, and

d. Depth to underlying groundwater beneath the LAA.

40. Although this Order does not require groundwater monitoring, it does include requirements for monitoring the raw water, supernatant discharge, and land application area. If the results of monitoring reveal a previously undetected threat to water quality or indicate a change in waste character such that the discharge poses a threat to water quality, the Executive Officer may require groundwater monitoring and/or the Central Valley Water Board may reopen this Order to reconsider groundwater limitations and other requirements to comply with Resolution 68-16. Accordingly, the discharge is consistent with the antidegradation provisions of Resolution 68-16.

OTHER REGULATORY CONSIDERATIONS

41. Water Code section 13267(b) provides that:

> In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region… shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

The technical reports required by this Order and the attached Monitoring and Reporting Program R5-2012-XXXX are necessary to assure compliance with these waste discharge requirements. The Discharger operates the facility that discharges the waste subject to this Order.

42. On 21 December 2010, the Lake County Community Development Department adopted a Mitigated Negative Declaration of Environmental Impact (MND) for the project pursuant to the requirements of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.)(“CEQA”). Mitigation measures to prevent potentially significant impacts to water quality identified in the MND were the following:

a. Incorporate best management practices to the maximum extent practicable to prevent or reduce discharge of all construction or post construction pollutants in the County storm drainage system.

b. A vegetative cover and/or organic materials shall be maintained within the sprinkler spray field to ensure that soil erosion is minimized for the life of the project.

c. The Discharger shall comply with all requirements of the California Regional Water Quality Control Board to achieve and maintain compliance with their regulations and meet their waste discharge requirements.

The Central Valley Water Board finds that these mitigation measures, which are incorporated into this Order as discharge requirements, are adequate to reduce water quality impacts to less than significant.

43. In addition, this action to adopt waste discharge requirements for this existing facility is exempt from CEQA in accordance with California Code of Regulations, title 14, section 15301.

44. The California Code of Regulations, title 27 ("Title 27") contains regulatory requirements for the treatment, storage, processing, and disposal of solid waste. However, Title 27 exempts certain activities from its provisions. Discharges regulated by this Order are exempt from Title 27 pursuant to provisions that exempt wastewater discharges. This exemption, found at Title 27, section 20090(b), is described below:

> (b) Wastewater – Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields, if the following conditions are met:
>
> (1) The applicable regional water quality control board has issued WDRs, or waived such issuance;
>
> (2) The discharge is in compliance with the applicable water quality control plan; and
>
> (3) The wastewater does not need to be managed … as a hazardous waste.

45. The discharge authorized herein is exempt from the requirements of Title 27 because:

- The Central Valley Water Board is issuing WDRs.
- The discharge is in compliance with the Basin Plan, and;
- The wastewater discharged to the LAA does not need to be managed as hazardous waste.

46. State regulations that prescribe procedures for detecting and characterizing the impact of waste constituents from waste management units on groundwater are found in Title 27. While the WTP is exempt from Title 27, the data analysis methods of Title 27 may be appropriate for determining whether the discharge complies with the terms for protection of groundwater specified in this Order.

47. Pursuant to Water Code section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

PUBLIC NOTICE

48. All of the above and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.

49. The Discharger and interested agencies and persons have been notified of the intent to prescribe waste discharge requirements for this discharge, and they have been provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

50. All comments pertaining to the discharge were heard and considered in a public meeting.

IT IS HEREBY ORDERED that, pursuant to Water Code sections 13263 and 13267, the Riviera West Mutual Water Company and its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted there under, shall comply with the following:

[Note: Other prohibitions, conditions, definitions, and some methods of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated 1 March 1991.]

A. Discharge Prohibitions:

1. Discharge of wastes from both the WTP and LAA to surface waters is prohibited.

2. Discharge of waste classified as 'hazardous', as defined in California Code of Regulations, title 23, section 2521(a) is prohibited. Discharge of waste classified as 'designated waste', as defined in Water Code section 13173, in a manner that causes violation of groundwater limitations, is prohibited.

3. Discharges of waste to locations other than described in the Findings and shown on Attachment C are prohibited.

B. Discharge Specifications:

1. Discharge to the land application area shall be limited to a monthly average dry weather flow not to exceed 15,000 gpd during the months of May through September and a monthly average wet weather flow not to exceed 7,000 gpd during the months of October through April.

2. For any calendar day when supernatant is discharged to the LAA, the combined depth of supernatant applied and direct rainfall shall not exceed two inches.

Compliance with this requirement shall be determined based on daily precipitation totals measured at the Kelseyville Station No. A80 4488 00 or other approved rain gauge.

3. No waste constituent shall be released or discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of the Groundwater Limitations.

4. Neither the treatment nor the discharge shall cause a nuisance or condition of pollution as defined by the Water Code section 13050.

5. Objectionable odors originating at this facility including the land application area shall not be perceivable beyond the limits of the water treatment plant site boundaries.

6. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.

7. All treatment, storage, and disposal facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100 year return frequency.

8. The facility shall have sufficient treatment, storage, and disposal capacity to accommodate allowable wastewater flow and design seasonal precipitation during the winter months. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

C. Land Application Area Requirements:

1. The discharge of filter backwash supernatant shall be distributed uniformly on the LAA.

2. Discharge of filter backwash supernatant, including runoff, spray, or droplets from the system, shall not occur outside the boundaries of the LAA. Waste application using sprinklers or drip irrigation is acceptable if the discharge complies with all requirements of this Order.

3. The Discharger shall maintain the LAA to prevent the runoff of supernatant water and supernatant/stormwater mixtures. Specifically, the tailwater return valve shall be open at all times when filter backwash supernatant is being discharged to the LAA.

4. All applied filter backwash supernatant must infiltrate before the next irrigation event. No pooling or ponding of irrigated water shall occur beyond 24 hours after application.

5. The Discharger shall not discharge supernatant to the LAA during moderate to heavy[1] precipitation, when storm water runoff is being generated, or when soils are saturated.

6. Discharges to LAA and vegetative cover within the LAA shall be managed to minimize both erosion and runoff from the irrigated area.

7. The LAA shall be managed to prevent breeding of mosquitoes. More specifically:

   a. All applied irrigation water must infiltrate completely within 24 hours.

   b. Ditches not serving as wildlife habitat should be maintained free of emergent, marginal, and floating vegetation.

   c. Low pressure pipelines, unpressurized pipelines, and ditches that are accessible to mosquitoes shall not be used to store wastewater.

8. The application of supernatant to the LAA shall comply with the following setback requirements:

Setback Definitions[1]	Minimum Irrigation Setback (feet)
Edge of land application area[2] to any watercourse[3]	25
Edge of land application area[2] to industrial, domestic, or irrigation well	50
Edge of land application area[2] to property line	5

[1] Additional setbacks may be needed to comply with other requirements of the Order.
[2] As defined by the wetted area produced during irrigation.
[3] Excludes ditches used exclusively for tailwater return; inlcudes the gunite-lined storm water drainage ditch.

D. Solids/Sludge Disposal Requirements:

1. Collected screenings and other solids removed from the water treatment plant shall be disposed of off-site in a manner that is consistent with Division 2 of Title 27.

2. Sludge and other solids generated from the water treatment process shall be removed from sumps, tanks, etc. as needed to ensure optimal operation and adequate hydraulic capacity.

3. Any proposed change in solids use or disposal practice from a previously approved practice shall be reported to the Executive Officer at least 90 days in advance of the change.

[1] As defined by the National Oceanic and Atmospheric Administration (NOAA) publication at www.srh.noaa.gov/srh/dad/sfc/chapter4.pdf

E. Groundwater Limitations:

1. Release of waste constituents from the discharge to the LAA shall not cause current groundwater quality to be degraded.

F. Provisions:

1. The following reports shall be submitted pursuant to Section 13267 of the Water Code and shall be prepared as described in Provision F.2.

   a. By **1 March 2012**, the Discharger shall submit an *Interim Compliance Plan and Long Term Precipitation Compliance Plan* that provides the following:

      i. Operational plans and specific procedures to be implemented to prevent the discharge of waste outside of the LAA and comply with this Order prior to the completion of the facility tailwater system improvements described in Finding 17.b.

      ii. Operational plans and specific procedures that will be implemented to measure precipitation daily, prevent the over-application of wastewater to the LAA, and ensure continuous compliance with Discharge Specification B.2 and Land Application Area Requirement C.5.

      iii. (Optional) If an onsite rain gauge is desired in lieu of using the Kelseyville weather station to determine compliance with Discharge Specification B.2, provide a map showing the location of the rain gauge, provide equipment specifications, and describe in detail the operational and maintenance procedures that will be implemented to ensure that rainfall totals are accurately measured daily.

   b. By **1 March 2012**, the Discharger shall submit a *Land Application Flow Monitoring Plan* for review and approval that provides operational details describing how supernatant application flow will be monitored and how daily flow rates to the land application area will be determined.

   c. By **1 February 2013,** the Discharger shall submit a *Facility Improvements Construction Completion Report* demonstrating that the improvements described in Finding 17.b. have been completed to prevent any discharge outside of the LAA. The report shall include as built site plans depicting the locations and geometry of all new or expanded waste treatment and containment facilities, and shall demonstrate that these improvements are adequate to ensure complete containment of the waste.

2. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geological sciences, shall be prepared by, or under the direction of, persons registered to practice in California pursuant to California Business and

Professions Code sections 6735, 7835, and 7835.1. To demonstrate compliance with California Code of Regulations, title 16, sections 415 and 3065, all technical reports, must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

3. The Discharger shall comply with Monitoring and Reporting Program R5-2012-XXXX, which is a part of this Order, and any revisions thereto as ordered by the Executive Officer.

4. The Discharger shall use the best practicable treatment and control, including proper operation and maintenance, to comply with this Order.

5. The Discharger shall report to the Central Valley Water Board any toxic chemical release data reported to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to Section 313 of the "Emergency Planning and Community Right to Know Act of 1986."

6. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and by reference a part of this Order. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."

7. At least 90 days prior to termination or expiration of any lease, contract, or agreement involving the sites and facilities used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Central Valley Water Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.

8. The Discharger shall submit to the Central Valley Water Board on or before each compliance report due date the specified document, or if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is reported, then the Discharger shall state the reasons for noncompliance and shall provide a schedule to come into compliance.

9. The Discharger shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge.

10. In the event of any change in control or ownership of the facility or land application areas, the Discharger must notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office. To assume operation as Discharger under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Central Valley Water Board, and a

statement. The statement shall comply with the signatory paragraph of Standard Provision B.3 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the Water Code. Transfer shall be approved or disapproved by the Executive Officer.

11. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel at each land application property shall be familiar with its contents.

12. The Central Valley Water Board will review this Order periodically and may revise requirements when necessary.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order or with the WDRs may result in the assessment of Administrative Civil Liability of up to $10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____.

_____

PAMELA C. CREEDON, Executive Officer

LLA:1/13/2012